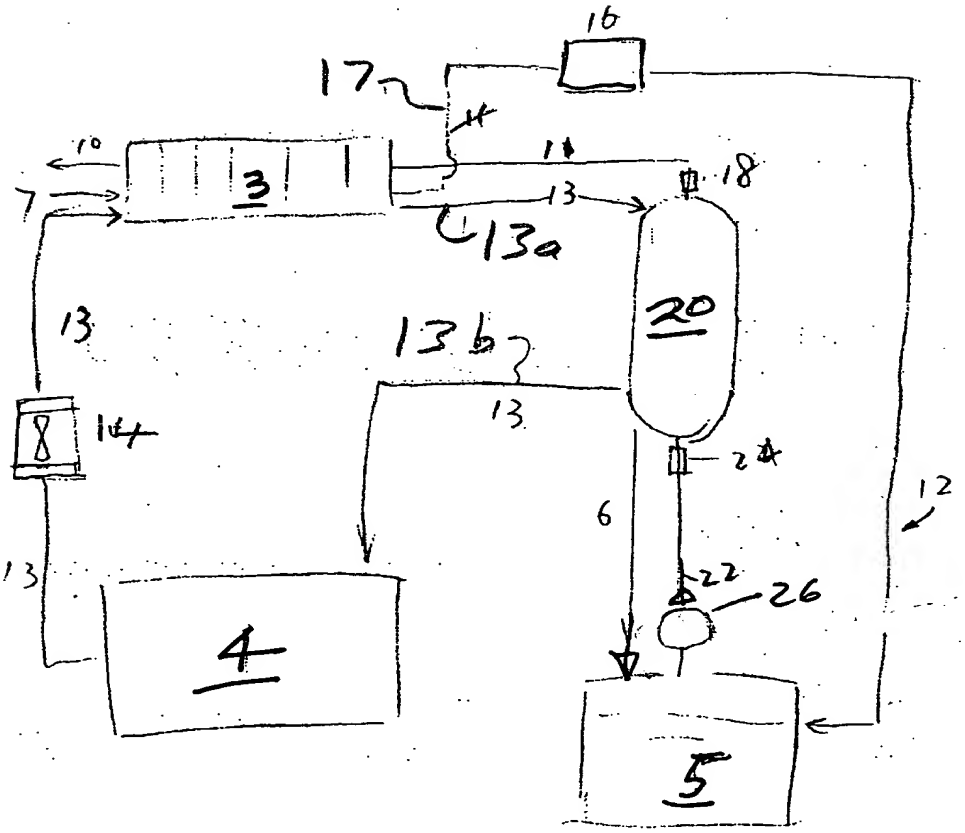

Fig 1

drogen recirculation And Pressure Control

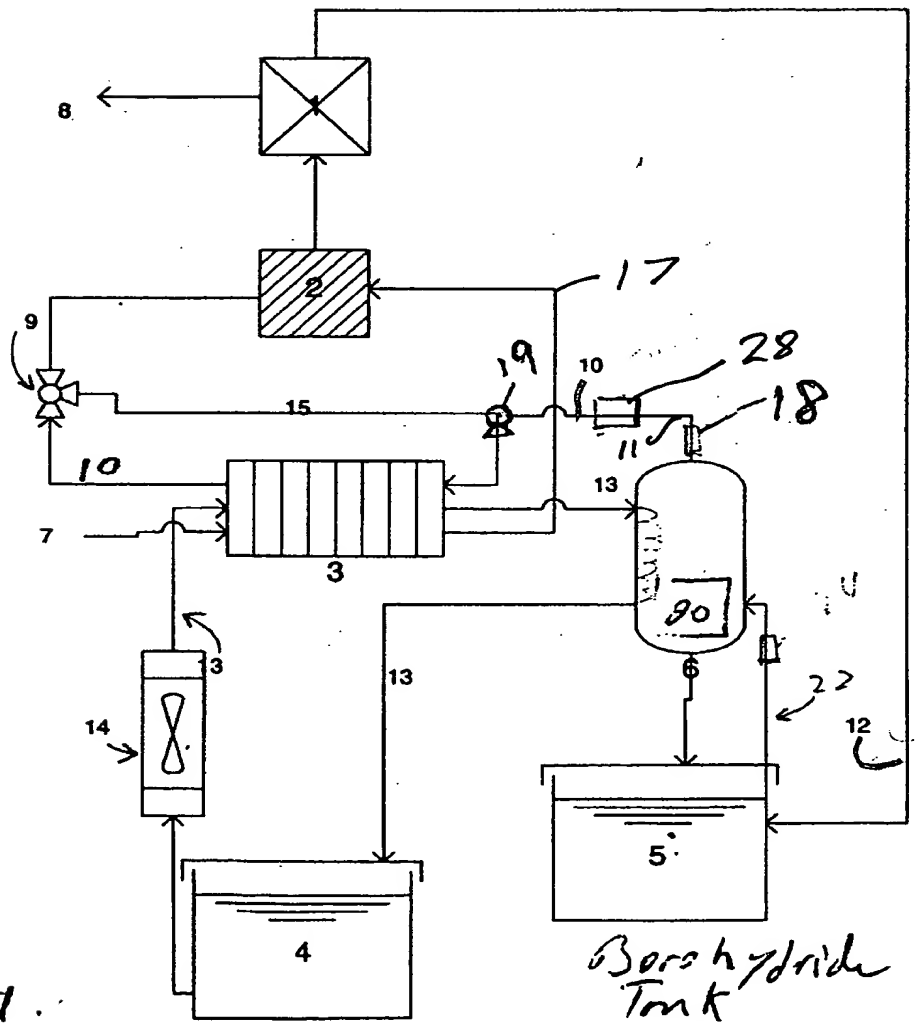

Fig 2

20 catal

exhaust.

2 - recovered water

10 - O_2 or Air.

$NaBH_4 + 2H_2O \rightarrow NaBO_2 + 4H_2$

Hydrogen Pr duction of Gen 2 Reactor

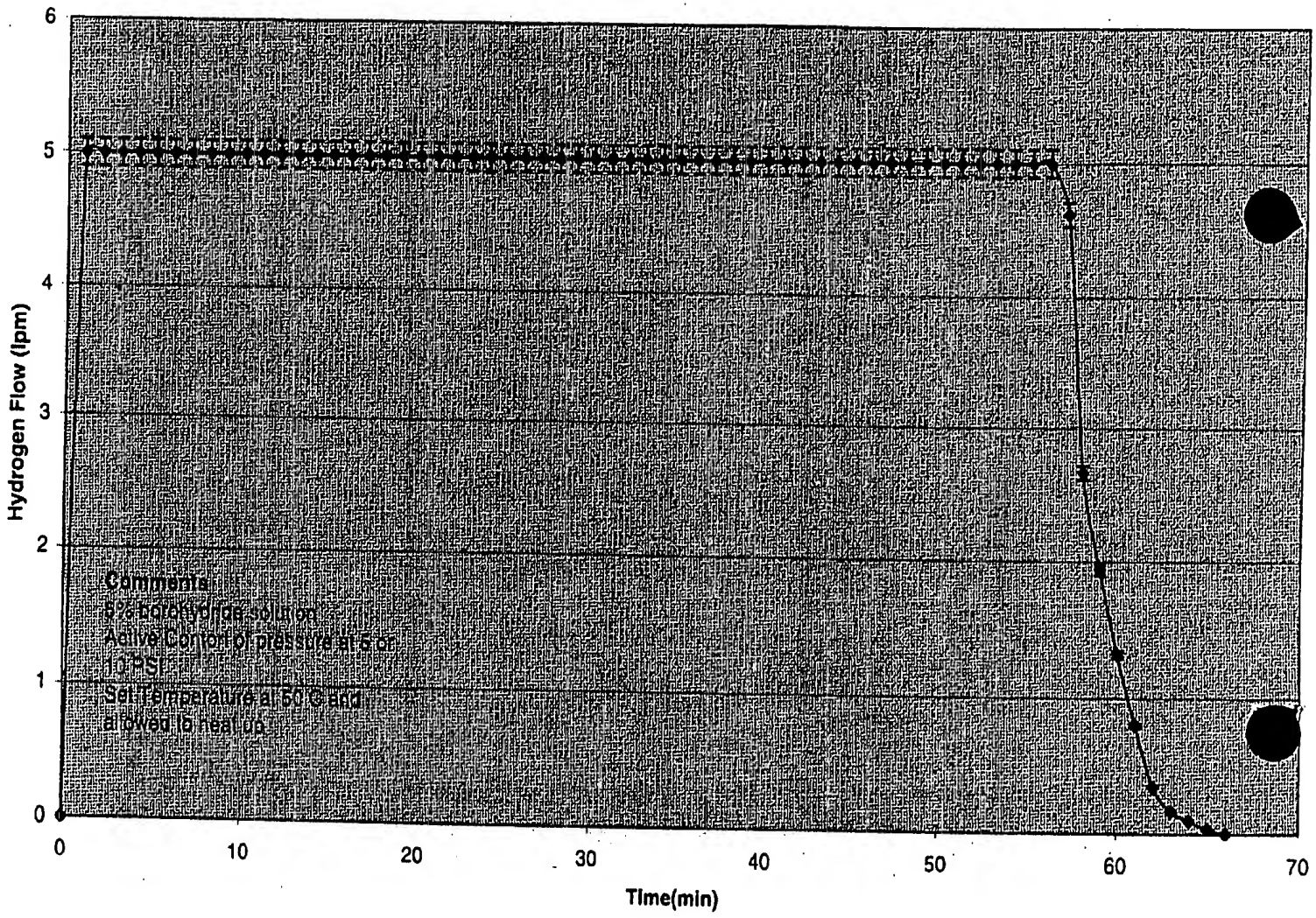

Fig3

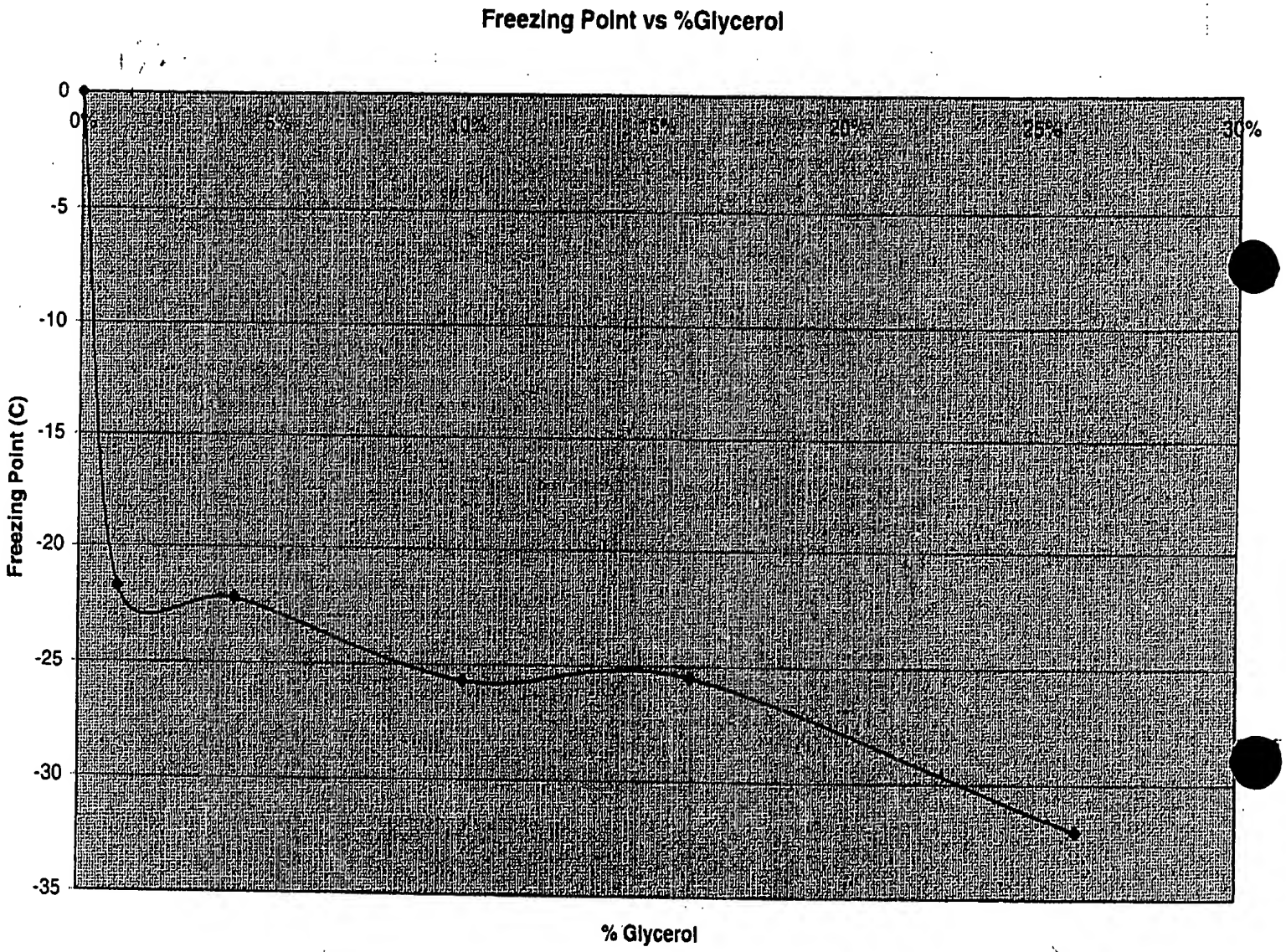

Fig 4

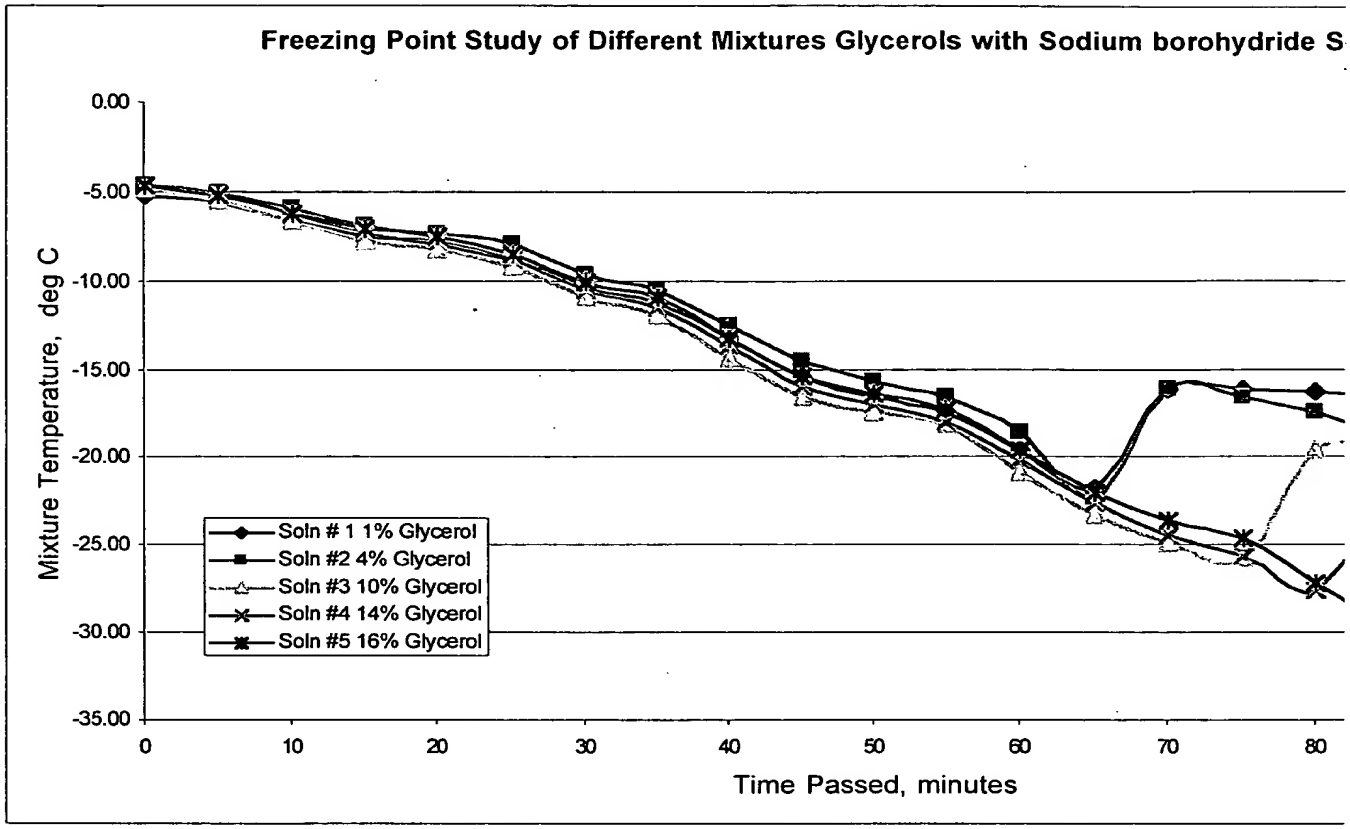
Freezing Point Study of Different Mixtures Glycerols with Sodium borohydride S
Mixture Temperature, deg C
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
-30.00
-35.00
0
10
20
30
40
50
60
70
80
Time Passed, minutes
Soln # 1 1% Glycerol
Soln #2 4% Glycerol
Soln #3 10% Glycerol
Soln #4 14% Glycerol
Soln #5 16% Glycerol

Figure 5

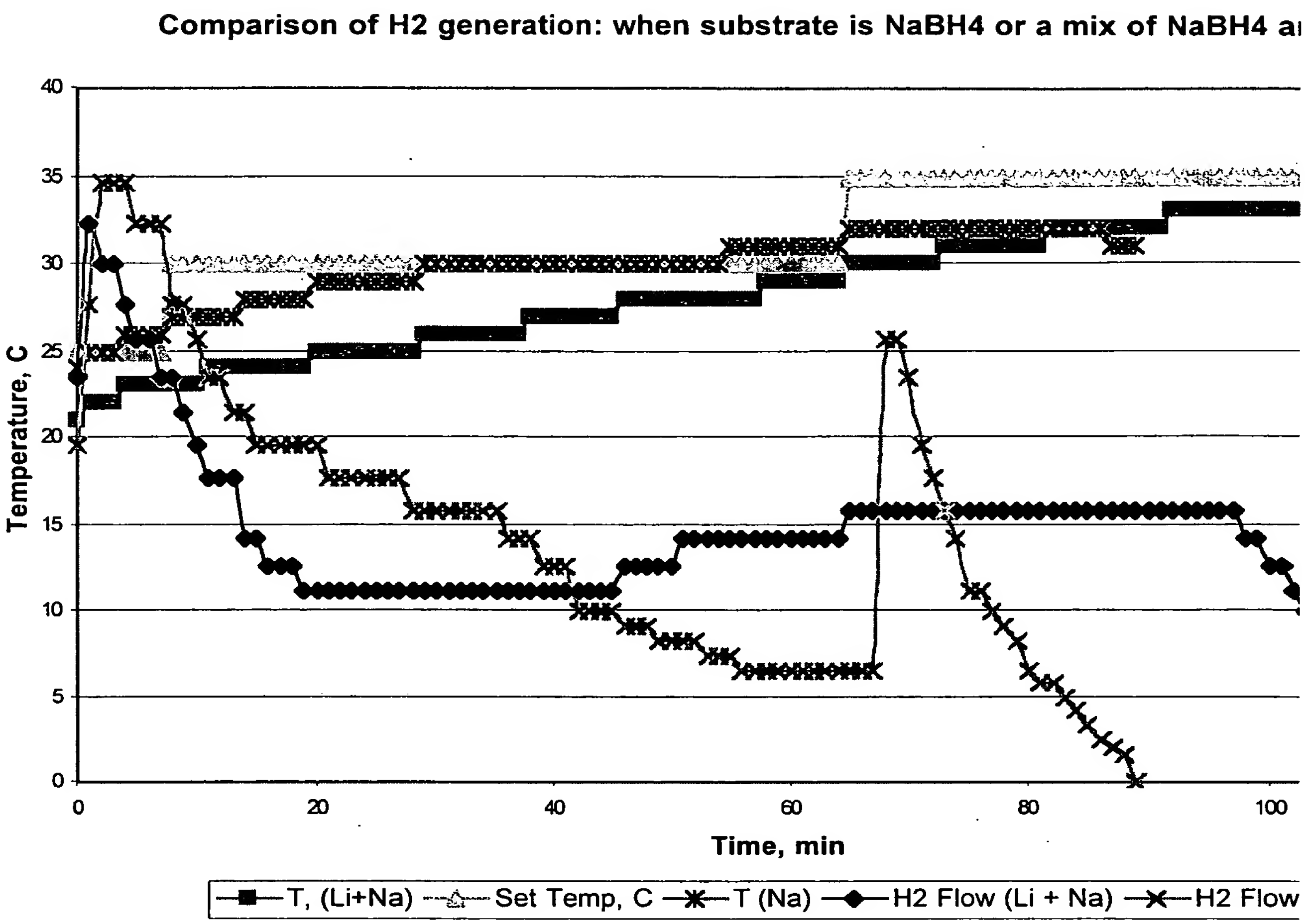
Comparison of H2 generation: when substrate is NaBH4 or a mix of NaBH4 a
40
35
30
25
20
15
10
5
0
Temperature, C
0
20
40
60
80
100
Time, min
T, (Li+Na)
Set Temp, C
T (Na)
H2 Flow (Li + Na)
H2 Flow

Figure 6

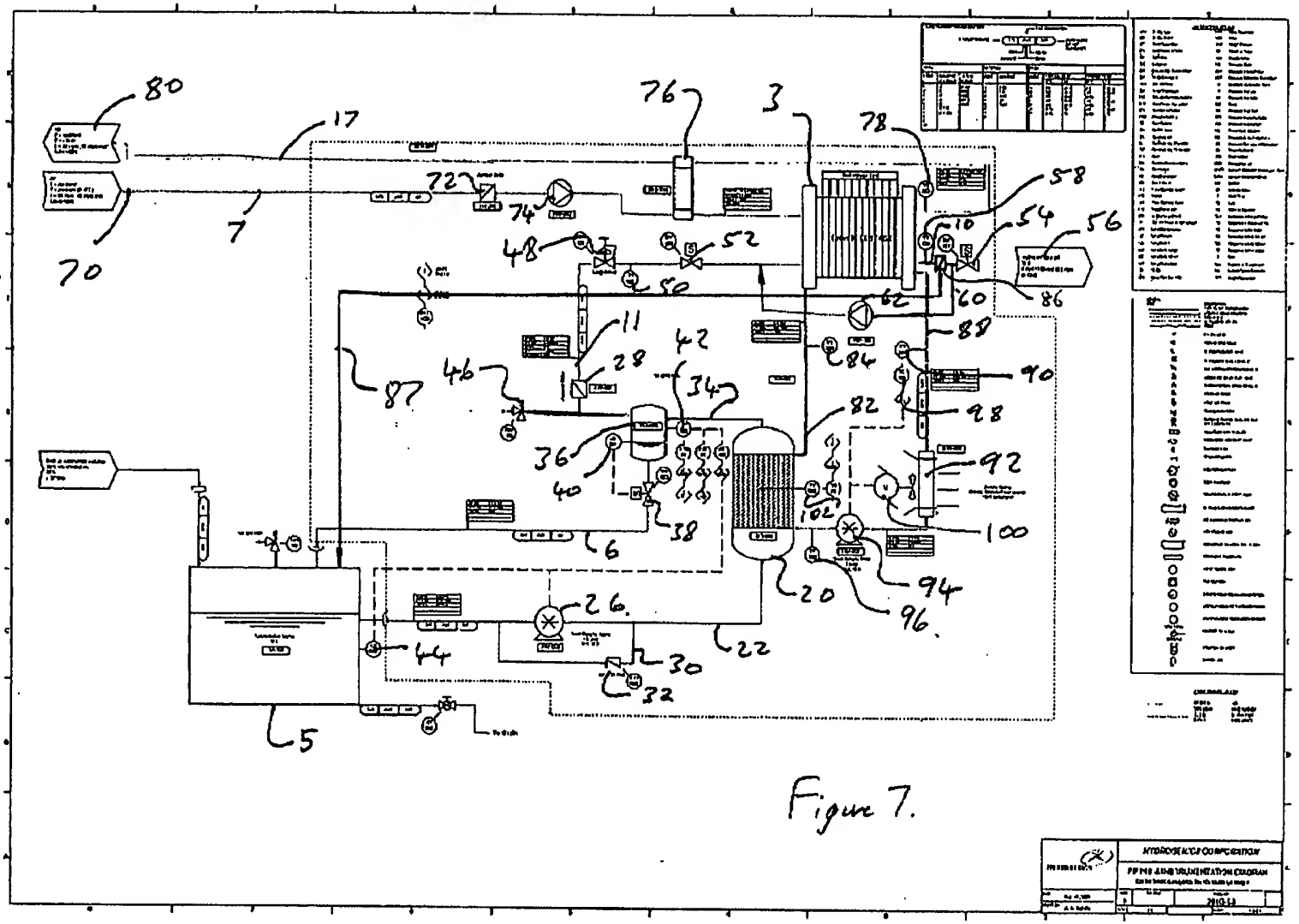

Figure 7.

For Thermal 1010-CL !

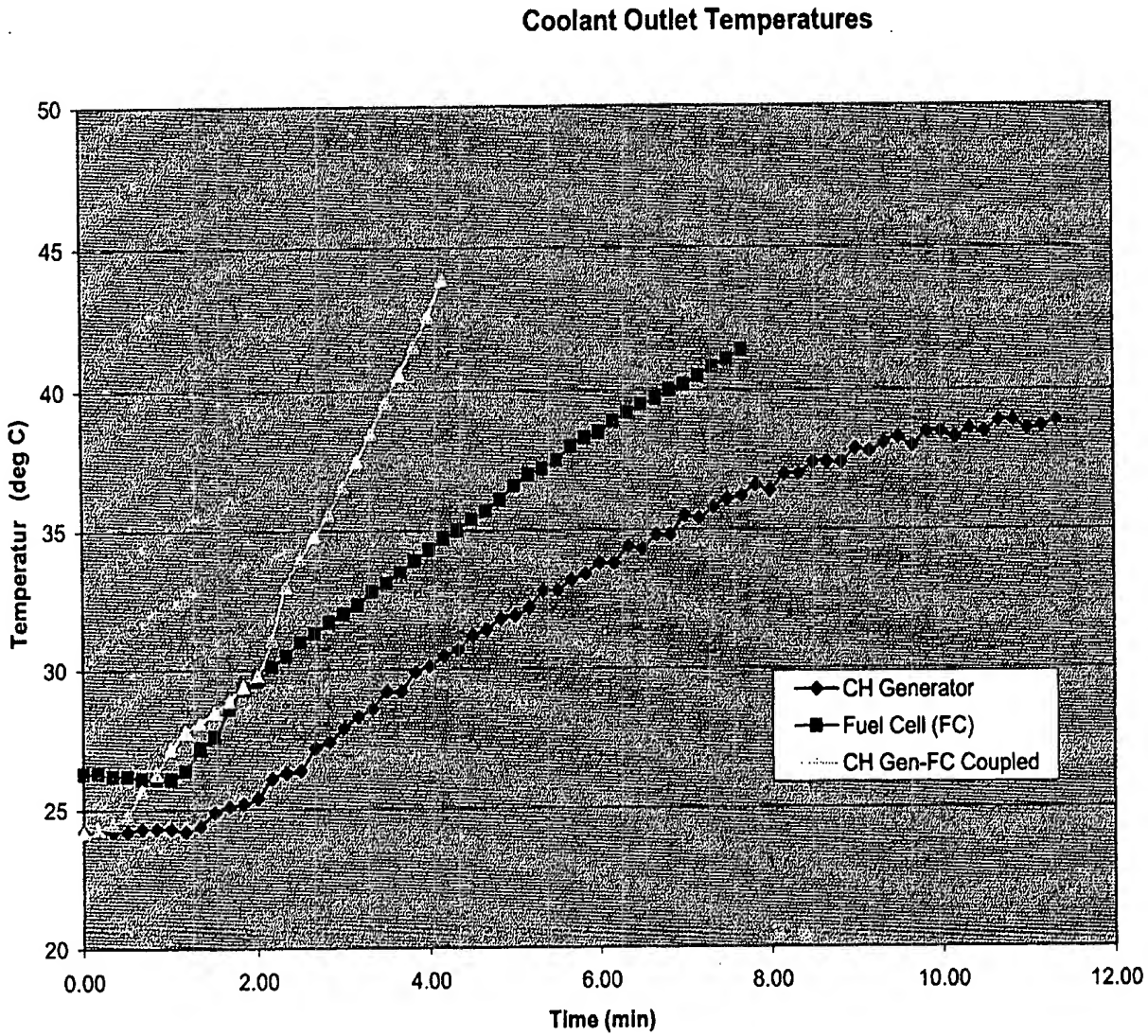

Fig 8

For Thermal 1010 - CL !

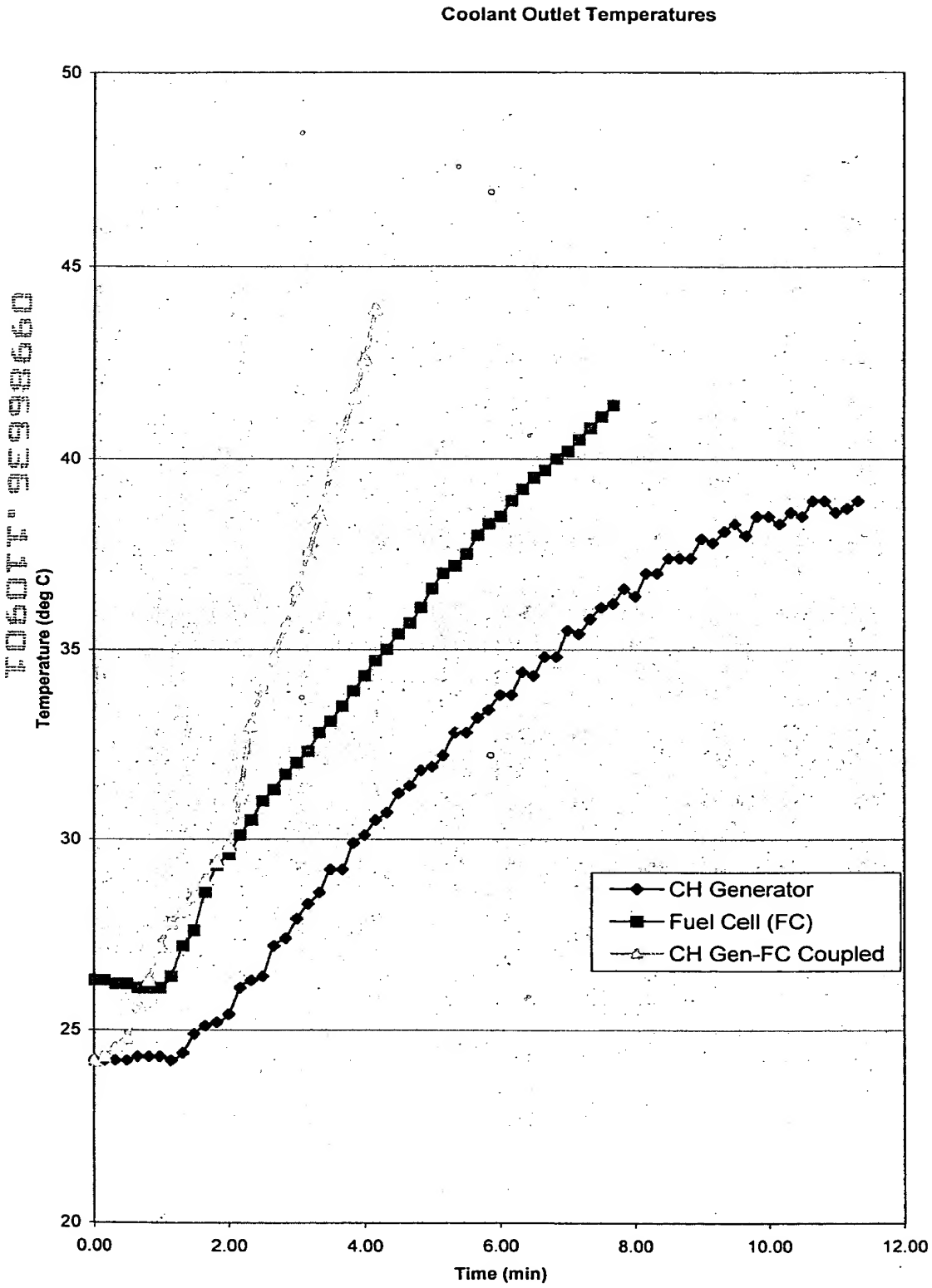
Coolant Outlet Temperatures
Temperature (deg C)
50
45
40
35
30
25
20
0.00
2.00
4.00
6.00
8.00
10.00
12.00
Time (min)
CH Generator
Fuel Cell (FC)
CH Gen-FC Coupled

Figure 9